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DESCRIPTORS *Abstracts; *Annotated Bibliographies; Aphasia; Cleft Palate; *Exceptional Child Research; Language Handicapped; *Speech Handicapped; Speech Pathology; Speech Therapy; Stuttering

ABSTRACT

The selected bibliography of research on speech handicaps contains approximately 69 abstracts with indexing information explained to be drawn from the computer file of abstracts representing the Council for Exceptional Children Information Center's complete holdings as of August, 1972. Abstracts are said to be chosen using the criteria of availability of document to user, currency, information value, author's reputation, and classical content. Preliminary information explains how to read the abstract (a sample abstract is included which identifies the different parts of the abstract), how to use the author and subject indexes, how to purchase documents through the Educational Resources Information Center Document Reproduction Service (an order blank is provided), an order blank for Exceptional Child Education Abstracts in which the abstracts are originally published, a list of indexing terms searched to compile the bibliography, and a list of journals from which articles are abstracted for the bibliography. Publication date of documents abstracted ranges from 1963 to 1971. (CB)

ED 069069



SPEECH HANDICAPPED - RESEARCH

A Selective Bibliography

August, 1972

CEC Information Center on Exceptional Children
An ERIC Clearinghouse
The Council for Exceptional Children
Jefferson Plaza, Suite 900
1411 S. Jefferson Davis Highway
Arlington, Virginia 22202

Exceptional Child Bibliography Series No. 627

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EC 050 144 E

The CEC Information Center on Exceptional Children

With a grant from the US Office of Education, the CEC Information Center was established at The Council for Exceptional Children to serve as a comprehensive source of information on research, instructional materials, programs, administration, teacher education, methods, curriculum, etc. for the field of special education. The Center functions as the Clearinghouse on Exceptional Children in the Educational Resources Information Centers (ERIC) program and also as a member center in the Special Education IMC/RMC Network. In addition, the CEC Center's program includes a commitment to a concentrated effort towards the development of products which will interpret research results into educational methods and practices.

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Each abstract contains three sections—bibliographic data, descriptors, and a summary of the document. The bibliographic section provides the document's identifying number (ED and/or EC), publication date, author, title, source, and availability. The descriptors indicate the subjects with which a document deals. The summary provides a comprehensive overview of the document's contents and in some cases document availability is announced here.

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Sample Abstract Entry

Clearinghouse accession number → EC 01 0769

Publication date → Publ. Date Jun 68

Author(s) → Hensley, Gene, Ed.; Buck, Dorothy P., Ed.

Title → Cooperative Agreements between Special Education and Rehabilitation Services in the West. Selected Papers from a Conference on Cooperative Agreements (Las Vegas, Nevada, February, 1968).

EDRS mf, hc indicates document is available in microfiche and hard copy.* → EDRS mf, hc VRA-546T66

Abstract number used in Indexes → ABSTRACT 769

ERIC accession number. Use this number when ordering microfiche and hard copy → ED 025 864

Number of pages. Use this figure to compute cost of hard copy. → 44p.

Institution(s) → Western Interstate Commission For Higher Education, Boulder, Colorado; United Cerebral Palsy Research And Education Foundation, Inc., New York; Rehabilitation Services Administration (DHEW), Washington, D. C.

Contract or grant number → VRA-546T66

Descriptors—subject terms which characterize content → Descriptors: exceptional child education; cooperative programs; vocational rehabilitation; vocational education; administration; mentally handicapped; state agencies; cooperative education; educational coordination; cooperative programs; state federal aid; administrative problems; communication problems; equalization aid; work study programs; handicapped; cost effectiveness

Summary → Five papers discuss cooperative work-study agreements between schools and vocational rehabilitation services in the western states. Areas discussed include the advantages of cooperative agreements, the forms and disadvantages of third party agreements, basic concepts of the programs, and an outline form to use when applying for matching funds; the relationship of special education, rehabilitation and cooperative plans, programs, and agreements; and California's past and present work study programs for the mentally retarded. Also reviewed are research demonstrating the economic feasibility of vocational training for the educable mentally retarded in the public schools and communication problems in work study programs. The conference summary considers the purposes, goals, essence of, and necessity for cooperative agreements. (MK)

Abstractor's initials → (MK)

*NOTE: EDRS mf indicates microfiche reproduction only.

INDEXING TERMS SEARCHED

Indexing terms used to retrieve information on *Speech Handicapped - Research* from the Center's computer file of abstracts are listed alphabetically below:

Aphasia
Cleft Lip
Cleft Palate
Exceptional Child Education
Exceptional Child Research
Language Handicapped
Language Handicaps
Retarded Speech Development
Speech
Speech Clinics
Speech Education
Speech Evaluation
Speech Habits
Speech Handicapped
Speech Handicaps
Speech Improvement
Speech Instruction
Speech Pathology
Speech Tests
Speech Therapy
Stuttering

JOURNALS USED

Abstracts of articles from the following periodicals appear in this bibliography:

ASHA
Behavior Therapy
British Journal of Disorders of Communication
Exceptional Children
Journal of Abnormal Psychology
Journal of Consulting and Clinical Psychology
Journal of Learning Disabilities
Journal of Music Therapy
Journal of Special Education
Journal of Speech and Hearing Disorders
Journal of Speech and Hearing Research
Pediatrics
Research Notes

The abstracts in this bibliography were selected from *Exceptional Child Education Abstracts*, Volumes I-III.

ABSTRACTS

ABSTRACT 10246

EC 01 0246 ED 018 911
 Publ. Date 67 19p.
 Wepman, Joseph M.; McFarland, Robert L.
Treatment of Stammering through the Use of a New Electronic Device.
 Chicago Univ., Ill., Speech And Lang. Res. Lab.
 EDRS Price 0.25;0.84

Descriptors: exceptional child research; speech handicapped; speech therapy; stuttering; electromechanical aids; language fluency; speech improvement; instructional aids; speech habits

To determine whether a small portable instrument could be used with speech therapy to reduce stammering severity, an electronic soundmaking device was developed. Individually fitted with molded earplugs, the device was similar to a hearing aid but produced a constant tone of sufficient volume to interrupt auditory feedback during speech and thereby to reduce the circularity of nonfluency. To test the device, subjects were selected from grade school, high school, and college. Half of the subjects received biweekly 1-hour speech therapy for 6 months with the use of the aid. The remaining served as controls and received no therapy. Each of the 24 subjects was pre- and posttested with (1) four subscales of the Wechsler Adult Intelligence Scale or the same subscales of the Wechsler Intelligence Scale for Children, whichever were age appropriate, (2) the Iowa Scale of Severity, and (3) the Gray Oral Reading Test (evaluated in terms of time in seconds taken to read the assigned paragraphs). Pretests indicated no statistically significant differences between the two groups on age, intelligence, or the Gray Test and Iowa Scale. Also, posttests indicated that the Gray Test was not significant between the two groups in pre- and post-training assessment. The ratings on the Iowa Scale, however, indicated significant improvement in the experimental group (beyond the .05 level) as compared to the control group. In addition, the therapist judged 10 of the experimental subjects as improved, and the subjects themselves considered the device helpful. Further research is urged, and a schematic drawing of the aid is included. A table presents data, and a bibliography lists 12 items. (GD)

ABSTRACT 10253

EC 01 0253 ED 018 913
 Publ. Date May 63 61p.
 Weaver, John B.; Wollersheim, Janet P.
A Pilot Study Comparing the Block System and the Intermittent System of Scheduling Speech Correction Cases in the Public Schools.
 Champaign Community Unit 4 Sch. Dist., Illinois
 EDRS Price 0.50;2.52

Descriptors: exceptional child research;

speech handicapped; speech therapy; teaching methods; speech improvement; speech instruction; speech therapists; articulation (speech); program effectiveness; program evaluation; time blocks; school services; scheduling; pilot projects; Templin Darley Articulation Test; Illinois Typological Rating Scale

To determine the most efficient uses of the public school speech correctionist's skills and time, a study was undertaken to investigate the effectiveness of the intermittent system and the block system of scheduling speech cases. With the intermittent system the correctionist is assigned to a number of schools and generally sees children twice a week for 15 to 20 minutes. Under the block system children receive daily therapy for 3 to 6 weeks, and 1 day a week the correctionist returns to alternate schools for carryover or severe cases. The study hypothesized that articulation problems would show greater improvement with the block system, and that when articulation problems were viewed in terms of four severity groupings the block system would make greater gains. Two correctionists used the block system in five Champaign (Illinois) public elementary schools with 153 children, while four correctionists used the intermittent system in 13 schools with 243 children. None of the children was in orthopedic or mentally retarded classes. The Templin-Darley Articulation Test was administered at the opening and close of the school year, and the Illinois Typological Rating Scale with severity ratings from one to four was applied. When the two total groups were compared, speech gains of block system children were consistently and significantly greater than those of the children on the intermittent system (.01 level of confidence). Of the four severity groupings, one block system group, the second most severe, made speech gains of statistical significance (.01 level). School principals and most teachers who experienced both systems preferred the block system. Six tables, five references, and an appended score sheet are provided. (GD)

ABSTRACT 10318

EC 01 0318 ED 012 539
 Publ. Date 30 Jan 67 251p.
 Rees, Mary Jane
An Evaluation of Speech and Hearing Problems in the Schools, Research Problems and Capabilities of a Research Center for Resolving Issues Pertaining to School Programs.
 American Speech And Hearing Assn., Washington, D.C.
 OEG-32-18-0000-1026
 EDRS Price 1.00;10.12

Descriptors: exceptional child research; speech therapy; speech handicapped; speech and hearing programs; speech therapists; research and development centers; research problems; articulation (speech); speech handicaps; public schools; certification; speech tests; hear-

ing tests; aurally handicapped; stuttering; professional training; research needs

Research is needed to determine the age at which a child with a functional articulatory disorder should begin therapy and the frequency of therapy. The authors rejected the survey method because of its many limitations. Research, using the experimental approach, was planned to screen 300,000 children. 724 of whom would be assigned to therapy, special attention, or untreated groups. Grade of beginning therapy and number of sessions would be varied. Results of the research would show whether therapy was more effective than vicarious learning and if so when and how therapy should be implemented. Noting that this experimental program was narrow in scope, the authors felt a new, more comprehensive approach was needed. Plans for the experimental program were set aside, and the authors developed a model for a research center for school speech therapists. Eight projects were undertaken to test the plan to determine if it could evolve information needed for determining standards for school speech and hearing programs. Projects involved school experience and preparation in test administration for student speech therapists, characteristics of pupils receiving speech and hearing therapy, assessment of oral communication skills, prospectus (for studies of stuttering, effects of therapy, remission of r errors, and remission of s errors), coordinated research, and teachers' ranking of children's participation in discussions. Functions of a research center are described. How such centers can encourage and aid the school speech therapist with research projects is shown. Included are a 100-item bibliography and a case record abstract form with instructions for use. (JD)

ABSTRACT 10321

EC 01 0321 ED 012 140
 Publ. Date Mar 67 82p.
 Templin, Mildred C.
The Identification of Kindergarten Children Least Likely to Show Spontaneous Improvement in Speech Sound Articulation. Final Report.
 Minnesota Univ., Minneapolis, Inst. Of Child Development
 EDRS Price 0.50;3.36

Descriptors: exceptional child research; speech handicapped; tests; identification; articulation (speech); speech handicaps; kindergarten children; predictive ability (testing); children; speech handicapped; kindergarten; speech therapy; prediction; screening tests; diagnostic tests; identification tests

An attempt was made to determine whether the measured articulation performance of kindergarten children could predict which children would develop satisfactory articulation and which children would continue to misarticulate

and need speech therapy by the second grade. In 1960, 2150 prekindergarten and kindergarten children were given a picture articulation test and imitation articulation test. In 1962, the children were tested with an imitation articulation test, the Spencer Articulation Test, and an intelligibility rating. For each of these tests a cut-off score was set to identify approximately the same percentage of children from the test group as were receiving speech therapy in elementary schools. Results showed the percentage of girls identified by all three tests was smaller than the percentage of boys. The 1962 imitation articulation test prediction was satisfactory for boys and girls but somewhat better for girls. The 1962 Spencer Articulation Test prediction was satisfactory for boys and girls but generally better for the boys. Prediction on the 1962 intelligibility rating was not satisfactory. The hypothesis was not supported that fewer children scoring inconsistently on the 1960 tests would need speech therapy in 1962 than children who scored consistently in 1960. Included are 24 references. (MY)

ABSTRACT 10469

EC 01 0469 ED 019 787
Publ. Date 66 53p.
Jensen, Paul J.

Effects of Reward and Punishment on Stuttering in Children.

Florida Univ., Gainesville, Communication Sciences Laboratory
OE-6-10-170
EDRS Price 0.25;2.20

Descriptors: exceptional child research; speech handicapped; reinforcement; children; negative reinforcement; positive reinforcement; speech handicaps; stuttering; verbal stimuli

The study was designed to determine whether or not there are significantly greater latency and response durations in children's speech as a result of verbal punishment compared to reward, and whether the effects are greater in younger or older children and in boys or girls. Subjects were 160 boys and girls from third and sixth grades. During a control period subjects repeated trisyllable nonsense words produced by a recorded voice. During the differential treatment period, subjects again repeated the nonsense words. Group A received positive verbal reinforcement, and Group B received negative verbal reinforcement. Dependent variables were latency duration (time from the end of an auditory stimulus to the beginning of subject's response) and response duration (time from beginning to end of a subject's response). Independent variables were period (control and effort), condition (reward and punishment), grade (3 and 6), and sex (female and male). Analysis of variance and covariance were used to evaluate the data and revealed evidence of heterogeneity of variance so that findings may not be assumed to be related only to treatment levels or means. Conclusions were (1) intrinsic characteristics existing among children

need to be isolated for maximum understanding of disfluency, (2) the general tendency in the literature to interpret adult findings as applicable to children may be unwarranted, (3) latency appears unrelated to reward and punishment for boys and girls in third and sixth grades, (4) third grade children have more disfluency (as measured by response duration) than sixth grade children in this situation, but not necessarily as a result of punishment, (5) generally, verbal punishment was associated with longer utterance than verbal reward, and (6) girls had shorter responses when rewarded and longer responses when punished as compared to males who showed no difference between conditions. A reference list cites 25 items. (MY)

ABSTRACT 10637

EC 01 0637 ED 024 197
Publ. Date Jan 68 557 p.
Garrott, Edgar Ray

Speech and Language Therapy under an Automated Stimulus Control System.

New Mexico State University, Las Cruces
Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped
EDRS mf,hc
OEC-6-10-198
BR-5-0586

Descriptors: exceptional child research; programed instruction; mentally handicapped; speech therapy; learning disabilities; automation; schematic studies; aphasia; voice disorders; discrimination; stimulus behavior; teaching machines; reinforcement; language handicapped; aural stimuli; articulation (speech); Templin Darley Articulation Test; Automated Stimulus Control System; ASCS

Programed instruction for speech and language therapy, based upon stimulus control programming and presented by a completely automated teaching machine, was evaluated with 32 mentally retarded children, 20 children with language disorders (childhood aphasia), six adult aphasics, and 60 normal elementary school children. Posttesting with the Templin-Darley Articulation Test showed that the Automated Stimulus Control System (ASCS) machine treatment produced non-significant results with mental retardates receiving pure tone plus M&M candy reinforcement, and significantly improved discrimination and articulation with those receiving pure tone only reinforcement ($p < .05$). ASCS machine treatment produced significant changes with child aphasics ($p < .01$). Following treatment, these subjects also showed improvement on the Peabody Picture Vocabulary Test, the Illinois Test of Psycholinguistic Abilities, and on word list performance. Both ASCS machine treatment and ASCS clinician-presented treatment produced significantly improved articulation with normal elementary school children ($p < .001$). Adult aphasics

showed no significant change, nor did retardates receiving traditional therapy. Results indicated that significant changes in functional articulation programs occurred in 20% of the time usually required by traditional therapies. (Author SN)

ABSTRACT 10638

EC 01 0638 ED 024 199
Publ. Date 04 Jul 68 71p

Webster, Ronald L.

Effects of Stutterers' Self-Monitoring on Retention of Fluency Generated by Delayed Auditory Feedback. Final Report.

Hollins College, Virginia
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-2-078290-3550
BR-7-8290

Descriptors: exceptional child research; speech handicapped; speech therapy; stuttering; speech handicaps; speech improvement; auditory discrimination; auditory training; aural stimuli; audiolingual methods; theories; language fluency; speech skills; feedback; Delayed Auditory Feedback

Several experiments that manipulate stuttering by the use of delayed auditory feedback (DAF) and the prolongation of speech are reported. In a study on six severe stutterers (aged 15 to 47), self monitoring as a source of reinforcement in the use of DAF reduced stuttering frequency. Stuttering frequency was investigated with six severe stutterers (aged 14 to 28) as a function of five different intervals of DAF. Results indicated that the continuous presentation of DAF significantly improved fluency ($p < .02$), that there was little difference between the various levels of DAF and that there was no lasting effect. A method for shaping fluent speech in stutterers was developed that modified the Goldiamond (1965) method by using the DAF without his special contingent relationships, that used no monitoring of reading rate, and added rate discrimination training to the fluency shaping program. Eight severe stutterers (aged 15 to 47) spent a total of 10 to 40 hours in the program, advanced at their own rate, and had blocking levels of zero by the time they reached the conversation part of the program; the effect had lasted 6 months at the time of this report. An auditory interference theory and a reexamination of the Sutton and Chase report are presented. (Author/SN)

ABSTRACT 10808

EC 01 0808 ED 024 200
Publ. Date Feb 68 47p.

Van Riper, Charles; Erickson, Robert Cross-Validation of a Predictive Screening Test for Children with Articulatory Speech Defects. Final Report.

Western Michigan University, Kalamazoo

Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-3-7-068717-0198
BR-6-8717

Descriptors: exceptional child research; speech handicapped; tests; identification; speech therapy; test validity; elementary school students; grade 1; grade 2; grade 3; test results; student testing; speech tests; phonemes; screening tests; articulation (speech); Predictive Screening Test of Articulation; PSTA

To determine the accuracy with which the 47-item Predictive Screening Test of Articulation (PSTA) is able to identify first grade children who will master their articulation errors without speech therapy by the time they enter third grade, two groups of children were studied who were deficient enough in speech to be enrolled in therapy, but had no anatomic anomaly or were enrolled in special education classes. The basic cross-validation group had 144 children with an average of 6-6 years; the supplementary cross-validation group had 81 children with an average age of 6-7 years. The children were tested in the second month of school in 1965 (first grade), 1966 (second grade), and in 1967 (third grade), and had no therapy during this time. Results indicated that the predictive validity of the PSTA was demonstrated and that, for first grade populations similar to the basic cross-validation group, a cutoff score of 34 is optimally effective in differentiating children who will not require therapy from those who will. A 13-item bibliography, four tables, and the PSTA are included. A preliminary report is included in the ERIC system as ED 010 165. (SN)

ABSTRACT 10978

EC 01 0978 ED N.A.
Publ. Date Mar 68 10p.
Prins, David; Bloomer, H. Harlan
Consonant Intelligibility: A Procedure for Evaluating Speech in Oral Cleft Subjects.
Michigan University, Ann Arbor
Children's Bureau (DHEW), Washington, D. C.
EDRS not available
C-28
Journal Of Speech And Hearing Research; V11 N1 P128-37 Mar 1968

Descriptors: exceptional child research; speech handicapped; identification; speech pathology; cleft palate; speech tests; children; speech evaluation; consonants; evaluation techniques; tests; Fairbanks Rhyme Test

Since a major problem in evaluating the speech of oral cleft subjects is the lack of measures sufficiently sensitive to show a wide range of speaker ability, the study investigated the precision and validity of utilizing consonant intelligibility to assess oral cleft speech. Twenty subjects with cleft palates or palatopharyngeal insufficiency (aged 9 to 19) and normal speaking subjects (aged 10 to 12) recorded 50 randomized item word lists from

the Fairbanks Rhyme Test. Twenty untrained listeners transcribed the initial consonant sounds on score sheets, which were evaluated for errors per word list and distribution and type of error as a function of consonant class. Results showed that listeners were reliable (r equals 0.88) in responding to identical tapes on different occasions and that listener responses were chiefly a function of the speaker and not the response task. Responses to oral cleft speakers yielded a higher percentage of nasal-oral consonant confusion, as compared with responses to normal speakers. Comparison of oral cleft speakers showed a wide range of speaker ability with nasal and oral consonant confusion more prevalent in speakers with poorer palatopharyngeal valve mechanisms. (JB)

ABSTRACT 10982

EC 01 0982 ED N.A.
Publ. Date Feb 68 8p.
Smith, Robert M.; McWilliams, Betty Jane
Psycholinguistic Considerations in the Management of Children with Cleft Palate.
Pennsylvania State University, University Park;
Pittsburgh University, Pennsylvania
National Institutes Of Health (DHEW), Bethesda, Maryland
EDRS not available
DE-01697
Journal Of Speech And Hearing Disorders; V33 N1 P26-33 Feb 1968

Descriptors: exceptional child research; speech handicapped; communication (thought transfer); language handicapped; receptive language; expressive language; psycholinguistics; cognitive tests; cleft palate; speech therapy; Illinois Test of Psycholinguistic Abilities

Research studies resulting from clinical recognition of reduced verbal output in children with clefts were reviewed; patterns of communication in children with cleft lips and/or palates were tested by administering the Illinois Test of Psycholinguistic Abilities (ITPA) to 136 cleft palate children, aged 3 to 8. At all age levels and for all types of clefts and degrees of speech skills, these children showed a general depression in all nine areas of language evaluated by the ITPA, with relatively greater weaknesses in vocal and gestural expression and in visual memory. There was a tendency for poorer performance with increased age. Explanations for this general depression were emotional trauma from frequent hospitalization and the defect, and the possibility of a perception deficit in cleft children. Results suggested the need for differential diagnosis of children with clefts and for treatment programs geared to develop activities to improve expressive language. One table and six graphic profiles are given for each age level studied. (JB)

ABSTRACT 11055

EC 01 1055 ED N.A.
Publ. Date Feb 66 19p.

Canter, Gerald J.; Trost, Judith E.
The Speech Handicapped, Chapter III, Education of Exceptional Children.

Northwestern University, Evanston, Illinois

EDRS not available
Review Of Educational Research; V36 N1 P56-74 Feb 1966

Descriptors: exceptional child research; speech handicapped; articulation (speech); retarded speech development; speech tests; voice disorders; stuttering; etiology; speech therapy; mentally handicapped; language ability; measurement techniques; cerebral palsy; cleft palate; medical treatment; aphasia; research reviews (publications)

Research published between July 1962 and December 1964 treating nature, diagnosis, and therapy of speech and language disorders is reviewed. Topics covered include the following: articulation disorders, including articulation testing, articulation as related to oral function and structure and to auditory and motor abilities; delayed speech and language development; voice disorders; laryngectomy; and stuttering, including measurement, etiology, and therapy. Additional studies cited treat speech and language disorders of the mentally retarded, cerebral palsy and other neuromuscular disorders, cleft palate (including incidence of cleft lip and palate), velopharyngeal adequacy and speech proficiency, surgery in relation to speech and hearing problems, and adult aphasia. A 6-page bibliography is given. (JD)

ABSTRACT 11253

EC 01 1253 ED 026 797
Publ. Date Jan 68 39p.
Goldman, Ronald
Using the Initial Teaching Alphabet to Improve Articulation. Final Report.
Vanderbilt University, Nashville, Tennessee
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-2-3252-0450-6011
BR-6-2417

Descriptors: exceptional child research; speech handicapped; speech therapy; auditory training; preschool children; research reviews (publications); visual discrimination; initial teaching alphabet; speech improvement; articulation (speech); auditory discrimination; visual stimuli; phonemics; instructional materials; parent participation; multisensory learning; auditory tests; phonetic analysis; phonetics

Twenty-four preschool children (aged 3-3 to 5-6) were studied to test the efficacy of newly developed phonemic-visual-oral materials in the correction of articulatory problems. All subjects were given an articulation test and a battery of five tests to measure auditory memory span and intelligence. Twelve children received 50 sessions of instruction, 1 hour long, using the new materials based

on the Initial Teaching Alphabet and structured to cover auditory discrimination, sound sequencing, visual discrimination, phonemic synthesis and analysis, and rhyming. A control group of 12 was exposed to traditional articulation therapy procedure. The experimental group made significantly fewer errors in articulation after therapy than the control group based on the Goldman-Fristoe Filmstrip Articulation Test (p equals .05). No significant difference was found between groups in auditory memory skills and intelligence scores. Conclusions were that the experimental, visual-symbol approach has great potential in the modification of misarticulation. (RP)

ABSTRACT 11377

EC 01 1377 ED N.A.
Publ. Date Jun 69 7p.
Williams, Dean E.; Silverman, Franklin H.

Disfluency Behavior of Elementary School Stutterers and Nonstutterers: The Consistency Effect.

EDRS not available
Journal Of Speech And Hearing Research; V12 N2 P301-7 Jun 1969

Descriptors: exceptional child research; speech handicapped; stuttering; language rhythm; speech skills; speech habits

Each of 184 kindergarten through sixth-grade children, 92 stutterers and 92 matched nonstutterers, performed a speaking task two times consecutively. The kindergarten and first grade children repeated a series of sentences, and the second through sixth grade children read a passage. The consistency effect was observed in both groups. However, it was exhibited by a higher percentage of the stutterers than of the nonstutterers. This difference could be at least partially accounted for by the fact that the stutterers' median frequency of disfluency on the first performance of the task was much higher than that of the nonstutterers. Several implications are discussed. (Author)

ABSTRACT 11378

EC 01 1378 ED N.A.
Publ. Date Jun 69 11p.
Williams, Dean E. And Others

Disfluency Behavior of Elementary-School Stutterers and Nonstutterers: Loci of Instances of Disfluency.

EDRS not available
Journal Of Speech And Hearing Research; V12 N2 P308-18 Jun 1969

Descriptors: exceptional child research; speech handicapped; stuttering; language rhythm; speech skills

One hundred fifty-two children from kindergarten and grades one through six, 76 stutterers and 76 nonstutterers, performed a speech task. Each of the kindergarten and first grade children repeated 10 sentences after the experimenter, and each of the second through sixth grade children read a passage. All words judged to have been spoken dis-

fluently were analyzed for the presence of each of Brown's four word attributes: initial phoneme, grammatical function, sentence position, and word length. Disfluencies were not randomly distributed in the speech of these children. For both stutterers and nonstutterers, disfluencies occurred most frequently on words possessing the same attributes as those reported by Brown to be troublesome for adult stutterers. The findings of this study demonstrate the essential similarity in the loci of instances of disfluency in the speech of children and adults and stutterers and nonstutterers. (Author)

ABSTRACT 11399

EC 01 1399 ED N.A.
Publ. Date Jun 69 8p.
Quarrington, Bruce And Others

Goal Setting Behavior of Parents of Beginning Stutterers and Parents of Nonstuttering Children.

EDRS not available
Journal Of Speech And Hearing Research; V12 N2 P435-42 Jun 1969

Descriptors: exceptional child research; stuttering; parental aspiration; parent attitudes; speech handicapped

Parents of young beginning stutterers and parents of nonstutterers were studied to determine whether they differ in the goals they set for their children on a nonverbal task. The experiment represents a partial replication of an earlier work which studied older children with a longer stuttering duration. A group of 28 children, in which the stuttering duration did not exceed eight months, was investigated. Controls were matched for age, sex, and family occupation level. Parents were each placed in separate sound treated rooms from which they observed their child. After each set of five trials on the Rotter Board, the child's score was reported to the parents, who then were required to estimate the child's subsequent performance score. Reporting of the child's score was controlled so that each parent was exposed to a standard schedule of fixed degrees of successes and failures. The two groups of mothers differed significantly on three of the four measures considered, with the mothers of stutterers setting significantly lower goals for their children. The two groups of fathers did not differ significantly on the same four measures. Theoretical implications are considered briefly. (Author)

ABSTRACT 11711

EC 01 1711 ED N.A.
Publ. Date Feb 67 10p.
Weiner, Paul S.

Auditory Discrimination and Articulation.

EDRS not available
Journal Of Speech And Hearing Disorders; V32 N1 P19-28 Feb 1967

Descriptors: exceptional child research; auditory discrimination; tests; visual measures; individual tests; articulation (speech); auditory tests; research reviews (publications); age differences; test validity; speech handicapped

A review of research on the relationship between auditory discrimination and articulatory defects indicated that existing discrimination tests possess three major variables. The first variable included memory, vocabulary, context, and intelligence. More importantly, because of the nature of auditory discrimination, the validity of the tests was questioned. Validation could be achieved, however, by relating the test to a theory of auditory discrimination, if the relationship presently expected between auditory discrimination and articulation were to be found. The second variable lay in the definition and measurement of articulation defect. When subjects with only one or two errors in sounds were used, a positive relationship between auditory discrimination and articulation was never found, whereas one was found in studies where four or more errors were the criterion for inclusion. The third and most important variable was age, a positive auditory discrimination/articulation relationship being found in almost every study involving children below age 9, and in none involving only subjects above that age. It was thus recommended that longitudinal studies be made of the validity of auditory discrimination tests; both of the factors mentioned above and of the reliance upon external models; the role of maturation and learning in the development of auditory discrimination; and the methods of selecting those needing therapy. (MK)

ABSTRACT 11816

EC 01 1816 ED N.A.
Publ. Date Sep 67 9p.
Sommers, Ronald K. And Others

Factors Related to the Effectiveness of Articulation Therapy for Kindergarten, First, and Second Grade Children.

Montgomery County Schools, Norristown, Pennsylvania
EDRS not available
Journal Of Speech And Hearing Research; V10 N3 P428-37 Sept 1967

Descriptors: exceptional child research; speech handicapped; speech therapy; articulation (speech); kindergarten children; grade 1; grade 2; speech improvement

To determine the degree to which articulation improvement is influenced by grade level, degree of defectiveness, stimulability responses, and amount of speech therapy, articulation therapy was administered by 20 speech clinicians to 288 suburban school children. Articulation was tested before and after the eight and one-half month treatment period, using the Warnock-Medlin cards, a version of the McDonald deep test of articulation, and the Carter-Buck Prognostic Test. Effectiveness of therapy was not dependent on grade or severity of defect. Subjects with poor stimulability scores derived significantly more benefits from therapy than those with good stimulability scores (p less than .001). Kindergarten subjects with more severe

speech problems showed significantly more improvement in articulation than second graders with similar defects (p less than .001). In deciding which children should be accepted for treatment, conclusions were that children from kindergarten, first, and second grades with poor stimulability scores will benefit more from speech therapy than those with good scores and that speech therapy is effective for these children regardless of the severity of their speech problems. (JB)

ABSTRACT 11913

EC 01 1913 ED N.A.
 Publ. Date Dec 67 7p.
 Quist, Raymond W.; Martin, Richard R.
The Effect of Response Contingent Verbal Punishment on Stuttering.
 EDRS not available
 Journal Of Speech And Hearing Research; V10 N4 P795-801 Dec 1967

Descriptors: exceptional child research; stuttering; behavior change; verbal operant conditioning; stimulus behavior; verbal stimuli; negative reinforcement; speech improvement; speech handicapped

The effects of presenting the verbal stimulus, wrong, contingent on stuttering were studied in three adult male stutterers. Each subject's stuttering baserate was obtained, then the word, wrong, was made contingent on each stuttering. For two subjects, the verbal punishment, wrong, occasioned a 30 to 40% reduction in stuttering frequency. For the third subject, verbal punishment produced almost total suppression of stuttering, its removal was followed by a return to baserate frequency, and its reintroduction resulted in an immediate and substantial reduction in stuttering. (Author/GD)

ABSTRACT 12071

EC 01 2071 ED 010 165
 Publ. Date 66 75p.
 Van Riper, Charles
A Predictive Screening Test for Children with Articulatory Speech Defects.
 Western Michigan University, Kalamazoo
 Office Of Education (DHEW), Washington, D. C.
 EDRS mf, hc
 CRP-1538
 BR-5-0399

Descriptors: exceptional child research; speech handicapped; identification; speech tests; predictive measurement; test construction; speech improvement; articulation (speech); grade 1; rating scales; test validity; elementary school students; speech evaluation

A test to identify defective articulation in first grade children was constructed using the empirical scale derivation method to seek test items for the prediction of articulatory maturation. After selection and reduction to 35 items, an experimental item pool was administered to 167 beginning first-grade children who had been diagnosed as having

functionally defective articulation. Requests were made that none of the subjects receive therapy during the study period. The subjects were classified in the beginning of the second grade as having still defective or normal articulation. This was done also at the third-grade level. Item analyses were performed to identify items which differentiated the groups. A response record sheet was individually scored with the keys derived empirically, the resultant frequency distributions of scores were analyzed, and possible cut-off scores were established. (RS)

ABSTRACT 20017

EC 02 0017 ED N.A.
 Publ. Date Jun 67 4p.
 Sherman, Dorothy; Geith, Annette
Speech Sound Discrimination and Articulation Skill.
 EDRS not available
 Journal Of Speech And Hearing Research; V10 N2 P277-80 Jun 1967

Descriptors: exceptional child research; speech handicapped; tests; articulation (speech); auditory discrimination; auditory tests; speech tests; intelligence tests; testing; kindergarten children

To relate differences in articulation skills to differences in sound discrimination ability, over 500 kindergarten children were tested with the Templin Speech Sound Discrimination Test; of these, two experimental groups, consisting of 18 subjects with high scores and 18 subjects with low scores, were selected to receive the Templin-Darley Picture Articulation Test. Scores for the group ranking high on the sound discrimination test were high on the articulation test; for the other group the scores were low (beyond the .001 level of significance for both). Thus a causal relationship between discrimination ability and poor articulation ability was recommended. Although the Peabody Picture Vocabulary Test indicated a mean IQ of 122.6 for the high group and 103.5 for the low group (beyond the .001 level of significance), this difference was attributed not to the difference in articulation, but rather to the method and criterion for selecting the high group and the likelihood of confusion of words by children who are poor at sound discrimination. (EB)

ABSTRACT 20100

EC 02 0100 ED N.A.
 Publ. Date Feb 69 18p.
 Shames, George H. And Others
Experimental Programs in Stuttering Therapy.
 EDRS not available
 Journal Of Speech And Hearing Disorders; V34 N1 P30-47 Feb 1969

Descriptors: exceptional child research; speech handicapped; stuttering; behavior change; negative reinforcement; positive reinforcement; operant conditioning; speech therapy; experimental programs; reinforcement

Rationale and development are de-

scribed for two types of therapeutic programs in stuttering, based on operant conditioning. The Stuttering Behavior Program attempts to modify the symptomatic features of stuttering by means of verbal consequences. The stutterer performs an assigned symptom modification task, and is reinforced for successful completion or punished for failure by means of the clinician's verbal response. The Thematic Content Modification is based on a categorization of stutterers' verbal responses: positive or those beneficial to therapy; negative or those incompatible with recovery. The program strives to increase frequency of positive and decrease negative thematic responses during interviews. After application of these programs, tentative conclusions were reached: stuttering rate was reduced; rates of operant responses increased; frequency of stuttering and observed thematic content appeared to co-vary. Assignment of patients to either program appears to be warranted. Further research on rates and types of responses is planned. (JB)

ABSTRACT 20140

EC 02 0140 ED N.A.
 Publ. Date Aug 69 6p.
 Curlee, Richard F.; Perkins, William H.
Conversational Rate Control Therapy for Stuttering.
 EDRS not available
 Journal Of Speech And Hearing Disorders; V34 N3 P245-50 Aug 1969

Descriptors: exceptional child research; speech handicapped; stuttering; operant conditioning; feedback; speech therapy; reinforcement; speech improvement

Conversational Rate Control Therapy, a behavior therapy for stuttering, is described. During normal conversation the patient is conditioned with delayed auditory feedback until he has reached a no-stuttering level. To insure voluntary rate control and phrasing, the client is given time-out (a penalty) each time he stutters or speaks too fast. After attaining voluntary rate control, the client undergoes site and social complexity successive approximation procedures. He is given opportunities to try new speech with a variety of persons and situations, beginning with the least difficult. Subjective clinical impressions indicate that most clients have achieved, in the laboratory at least, speech within normal limits of rate, fluency, and prosody. Further research is needed to refine the techniques currently employed in the therapy, and to assess the permanence of change and amount of generalization of change in stuttering. (Author/JB)

ABSTRACT 20506

EC 02 0506 ED N.A.
 Publ. Date Aug 66 8p.
 Wingate, M. E.
Stuttering Adaptation and Learning: II. The Adequacy of Learning Principles in the Interpretation of Stuttering.
 EDRS not available

Journal Of Speech And Hearing Disorders; V31 N3 P211-8 Aug 1966

Descriptors: exceptional child research; speech handicapped; stuttering; learning theories; behavior patterns; anxiety; behavioral science research; research reviews (publications); reactive behavior; operant conditioning; adaptation level theory; reinforcement

The article is the second in a series discussing whether or not learning theory principles adequately account for the development of stuttering. Data gained from studies of adaptation in stuttering have been used as support for various hypotheses of stuttering as a learned anticipatory avoidance behavior. The author states that the anxiety associated with anticipation should result in increased stuttering, but that adaptation studies have shown a decrease in stuttering. The theory is, therefore, inconsistent with the facts. Similarly, a discussion of such models of learning theory as instrumental avoidance learning, instrumental escape learning, and operant learning reveal limitations in their ability to account for stuttering. The author concludes that stuttering is not a learned behavior. (MK)

ABSTRACT 20964

EC 02 0964 ED 033 504
Publ. Date Jun 69 71p.
Pendergast, Kathleen And Others
A Study Of Protrusional Lisps to Identify Children Requiring Speech Therapy.
Seattle Public Schools, Washington
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEC-5-10-180
BR-5-0319

Descriptors: exceptional child research; articulation (speech); prediction; speech improvement; speech skills; speech tests; performance factors; speech handicapped; kindergarten children; primary grades; performance factors; speech evaluation; speech therapy

To determine factors influencing the permanency of a protrusional lisp and to incorporate them into predictive profiles, approximately 8,000 kindergarten children were screened for articulation and those appearing to have a protrusional lisp were tested individually. The 1,043 subjects exhibiting such a lisp were examined semiannually for 4 years with a battery of speech and other tests; their school records were assessed; no speech therapy was given. The data for the 475 subjects who remained, based on recovery and nonrecovery by the end of grade 3, were formulated into seven profiles, one for each testing period. The pattern indicated that no single test or subtest proved to be predictive at all periods. Results demonstrated a consistent increase in the number of subjects recovering, with 56% recovering without therapy. Higher recovery rates were found among subjects with a protrusional lisp only or with less severe articulation problems initially and more rapid

reduction of errors throughout. Also, subjects producing (t,d,n), with the tongue tip and not the blade had a better chance to recover without therapy. (Author/JD)

ABSTRACT 21013

EC 02 1013 ED N.A.
Publ. Date Jun 66 7p.
Sommers, Ronald K. And Others
The Effectiveness of Group and Individual Therapy.
Montgomery County Schools, Norristown, Pennsylvania
EDRS not available
Journal Of Speech And Hearing Research; V9 N2 P219-25 Jun 1966

Descriptors: exceptional child research; group therapy; speech handicapped; speech therapy; articulation (speech); speech improvement

Articulation therapy was administered to 240 children by 17 speech clinicians working in a suburban school system. Articulation testing was completed both before and after an 8 and 1/2 months' treatment period. Group therapy was found to be as effective as individual therapy, regardless of the severity of speech defectiveness or grade levels of the children. (Author)

ABSTRACT 21065

EC 02 1065 ED N.A.
Publ. Date 69 9p.
Weiner, Adeline E.
Speech Therapy and Behavior Modification: A Conspectus.
EDRS not available
Journal Of Special Education; V3 N3 P285-93 Fall 1969

Descriptors: exceptional child education; speech therapy; behavior change; literature reviews; educational theories; research; operant conditioning; reinforcement; stuttering; speech handicapped

A survey of literature is presented concerning the application of psychological learning theories to the systematic treatment of speech and language problems through behavioral strategies. Suggested readings include theoretical concepts involved in classical and instrumental learning, major research efforts in the field of speech disorders, and descriptions of techniques for the management of specific deficits. Readings on background, history, and terminology are noted, and literary references about specific categories of speech disorders are provided. (RD)

ABSTRACT 21718

EC 02 1718 ED N.A.
Publ. Date Feb 70 5p.
Webster, Ronald L. And Others

Changes in Stuttering Frequency as a Function of Various Intervals of Delayed Auditory Feedback.
Hollins College, Virginia, Department Of Psychology
Office Of Education (DHEW), Washington, D. C.

EDRS not available
OEG-7-8290

Journal Of Abnormal Psychology; V75 N1 P45-9 Feb 1970

Descriptors: exceptional child research; speech handicapped; stuttering; speech improvement; feedback; delayed auditory feedback

Stuttering frequency was investigated as a function of various intervals of continuously presented delayed auditory feedback (DAF). Five different intervals of DAF were presented to six severe stutterers while they read aloud. Results indicated that the continuous presentation of DAF significantly reduced stuttering frequency. Fluency enhancement was generally greatest during the shortest DAF intervals tested. No evidence was found for the carry-over of fluency generated by DAF into the period immediately following Ss' experience on DAF. The results were interpreted as being consistent with a view that stuttering is based on a defect in the processing of auditory feedback. (APA)

ABSTRACT 21768

EC 02 1768 ED 035 147
Publ. Date Aug 69 85p.
Harrison, Robert J.
A Demonstration Project of Speech Training for the Preschool Cleft Palate Child. Final Report.
Miami University, Coral Gables, Florida, School Of Medicine
Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped
EDRS mf,hc
OEG-2-6-061101-1553
BR-6-1101

Descriptors: exceptional child research; speech improvement; speech therapists; therapy; preschool programs; parent participation; language development; speech improvement; speech therapists; program evaluation; speech evaluation; articulation (speech); case studies (education)

To ascertain the efficacy of a program of language and speech stimulation for the preschool cleft palate child, a research and demonstration project was conducted using 137 subjects (ages 18 to 72 months) with defects involving the soft palate. Their language and speech skills were matched with those of a noncleft peer group revealing that the cleft group was significantly inferior in receptive and expressive language skills. The program consisted of stimulation in which the mother participated with the child for 1 hour each week; during the period the clinician worked directly with the child, counseled the mother and directed her participation, and observed the mother in language and speech stimulation. The results of the program indicated significantly better progress by those involved in the program, compared to a control group, in both language skills and speech skills. By the end of the program the children involved had skills commensurate with their chronological

age. Appendixes and extensive tables of results are included (JM)

ABSTRACT 21794

EC 02 1794 ED N.A.
Publ. Date Jun 66 13p.
Marge, Dorothy Kunsevich
The Social Status of Speech-Handicapped Children.
EDRS not available
Journal Of Speech And Hearing Research; V9 N2 P165-77 Jun 1966

Descriptors: exceptional child research; speech handicapped; parent attitudes; interpersonal relationship; social status; speech skills; social relations; playground activities; peer acceptance

Social position and parent attitudes were studied in 72 third-graders, 36 of whom were speech handicapped. Children and teachers completed sociograms; parents responded to questionnaires. Results indicated that speech handicapped children tended to hold lower social positions than normal speaking children in certain interpersonal relationships, ranking significantly lower in the areas of study and work activity and desirability as a dinner guest. In other areas of playground activity and general speaking ability, there were no significant differences between the groups. Parents of the two groups did not differ in attitudes toward children with defective speech, although parents of speech handicapped children placed a greater emphasis on the importance of good speech. It was also found that parents perceived speech disorders as less handicapping than other types of disabling conditions. (Author/MK)

ABSTRACT 22293

EC 02 2293 ED 024 694
Publ. Date Jul 67 105p.
Wepman, Joseph M.; Morency, Anne S.
School Achievement as Related to Developmental Speech Inaccuracy. Final Report.
Chicago University, Illinois
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEC-4-10-006
BR-5-0398

Descriptors: exceptional child research; speech handicapped; academic achievement; articulation (speech); auditory discrimination; enunciation improvement; grade 1; language research; reading achievement; speech skills; speech tests; speech therapy

A study, at the University of Chicago, of 177 unselected children (an entire first-grade class of normal intelligence, of common ethnic background, and within 6 months of their sixth birthday) was made to determine whether those children with speech inaccuracies consistent enough to qualify them for speech therapy would achieve in their school subjects as well as children having no speech inaccuracies; whether students receiving speech therapy (offered to half of the speech inaccuracy group) improved their school achievement or their articu-

lation accuracy acquisition more than those not receiving therapy; and whether a significant relationship existed between perceptual-modality factors and either school achievement or articulation. The study revealed no difference in school achievement between children who were considered to be in need of speech therapy and those who were not; no difference in school achievement whether a child had therapy or not; and no difference in improvement in articulation whether a child had speech therapy or not. A low but statistically significant relationship was found between the perceptual abilities and both articulation and school achievement. (Author/LH)

ABSTRACT 22887

EC 02 2887 ED 040 539
Publ. Date Jul 68 27p.
Coleman, Thomas; Langberg, George
An Automated and Programed Laboratory for Instruction in the Areas of Speech and Communication. Final Report.
Ossining Public Schools, New York
New York State Education Department, Albany, Division Of Research
EDRS mf,hc

Descriptors: exceptional child education; speech handicapped; speech therapy; programed instruction; autoinstructional methods; program evaluation; public schools; articulation (speech); educational methods; exceptional child research

An experimental public school speech therapy program is described, which offers automated, programed instruction in sound production and auditory training. The experiment includes self-teaching methods, as well as utilization of paraprofessional personnel under the supervision of a qualified speech therapist. Although the automated program was presented as a supplement to traditional speech therapy methods, an effort was made to evaluate its contribution to the accomplishment of therapy goals. Utilizing 28 subjects, the investigators compared articulation test scores of those who had received only traditional therapy with those who had received both traditional and automated therapy. Results indicated a significant improvement in articulation with those students who received combined treatment. Although the study was limited, it was felt that automated programing may represent an important instrumentality for accomplishing school therapy objectives. (JB)

ABSTRACT 23077

EC 02 3077 ED N.A.
Publ. Date Jul 70 4p.
Lawrence, Joyce R.;
Potter, Robert E.
Visual Motor Disabilities in Children with Functional Articulation Defects.
EDRS not available
Journal Of Learning Disabilities; V3 N7 P355-8 Jul 1970

Descriptors: exceptional child research; learning disabilities; speech handi-

capped; perceptual motor learning; articulation (speech); motor development; perceptual development

The investigation attempted to determine if the presence of visual-motor integration disabilities, as measured by the Developmental Test of Visual Motor Integration, was greater in preschool and primary grade children having functional articulation defects than in those without articulation defects—that is, normal speakers. Statistical analysis of the data revealed that the subjects possessing functional articulation defects showed a significantly higher degree of visual-motor integration disability than did the controls. Other statistical comparisons revealed that the male subjects with functional articulation defects performed significantly less well than did the control males on the Developmental Test of Visual Motor Integration. However, this difference was not found between the female subjects and female controls. A positive correlation was found to exist between visual-motor integration ages and the chronological and mental ages of the sample population. (Author)

ABSTRACT 23332

EC 02 3332 ED N.A.
Publ. Date 70 13p.
Prins, David
Improvement and Regression in Stutterers Following Short-Term Intensive Therapy.
EDRS not available
Journal Of Speech And Hearing Disorders; V35 N2 P123-35 May 1970

Descriptors: exceptional child research; speech handicapped; stuttering; speech therapy; speech improvement; language patterns; communication problems; followup studies; success factors

A study concerned with the effects of a specific treatment program upon stutterers was undertaken with the following objectives: the description of improvement and regression as a function of different problem areas which contribute to stuttering severity, an evaluation of the relationship between improvement and regression, and an evaluation of regression as a function of time after the termination of therapy. The subjects were 94 male stutterers from ages 8 through 21 at The University of Michigan Speech and Hearing Camp. The length of time since therapy had ended ranged from 6 months to 3 1/2 years. Subjects filled out a self-administered questionnaire about their stuttering. An average of 67% of responses on improvement after therapy indicated significant and lasting improvement but 33% said they had regressed to varying degrees. The study, which used the stutterer's own evaluation of his improvement and regression following therapy, facilitated the evaluation of a specific treatment program and suggested future modifications of the program. (GD)

ABSTRACT 23368

EC 02 3368 ED N.A.
Publ. Date Jun 70 9p.

Stark, Rachel E.; Pierce, Bruce R.
The Effects of Delayed Auditory Feedback on a Speech-Related Task in Stutterers.

EDRS not available

Journal Of Speech And Hearing Research; V13 N2 P245-53 Jun 1970

Based On A Ph.D. Dissertation, University Of Oklahoma Medical Center, Oklahoma City.

Descriptors: exceptional child research; speech handicapped; stuttering; adults; feedback; electronic equipment; response mode; behavior patterns

The responses of 15 adult stutterers and 15 matched nonstutterers were compared on a patterned syllable-repetition task under various auditory feedback conditions. The feedback signals were clicks activated by an electro-mechanical device at the time of lip closure. They were either synchronous (SAF) or delayed (DAF) or a combination (SAF/DAF). SAF was presented by bone conduction at a 40-dB sensation level, DAF by binaural air conduction with a delay of 140 or 200 msec, at sensation levels of 0, 10, 20, and 30 dB in DAF alone and at sensation levels of 40, 50, 60, and 70 dB in the SAF/DAF combination. Performances were evaluated in terms of pattern duration, lip-closure duration, and number of pattern errors. Stutterers and nonstutterers responded similarly to the feedback conditions. Three differences were found: during SAF alone, stutterers showed greater duration of lip closure; there were non-systematic differences between stutterers and nonstutterers in duration of lip closure during DAF and SAF/DAF conditions; and with increased intensity of DAF, stutterers showed a greater increase in number of pattern errors. (Author)

ABSTRACT 23399

EC 02 3399 ED N.A.
Publ. Date Apr 70 10p.
Bloodstein, Oliver

Stuttering and Normal Nonfluency--A Continuity Hypothesis.

EDRS not available

British Journal Of Disorders Of Communication; V5 N1 P30-39 Apr 1970

Descriptors: exceptional child research; speech handicapped; stuttering; speech skills; child language; language development; language fluency; speech habits; theories

The relationship between the speech interruptions of children who are ordinarily referred to as stutterers and those of children who are regarded as normal speakers is discussed. The terms stuttering and nonfluency were replaced by more descriptive terms: part-word repetition, word repetition, sound prolongation, and forcing. Research findings were then reviewed on these reactions as they have been observed in young children regarded as stutterers and those not regarded as stutterers. It was found that each of the above features of disfluent speech is found more frequently in

young stutterers than in young nonstutterers, and each occurs in readily discernible amounts in both groups. Little research has been done on the distribution of these features in the speech sequence or their frequency. The hypothesis is suggested that there is a basic continuity between forms of early stuttering and some features of early normal nonfluency. (GD)

ABSTRACT 23406

EC 02 3406 ED N.A.
Publ. Date May 70 5p.
Greenberg, Janet Berson

The Effect of a Metronome on the Speech of Young Stutterers.

EDRS not available

Behavior Therapy; V1 N2 P240-44 May 1970

Descriptors: exceptional child research; speech handicapped; stuttering; speech therapy; language fluency; pacing; speech skills

The influence of a metronome on the speech of stutterers aged 9-11 years is studied. The effect of telling the subject to pace his speech with the metronome is compared with having the metronome in the auditory background without instructions to pace. The subjects were 40 Negro boys (20 who received stuttering therapy, and 20 non-stutterers, who formed the control group. The subjects were asked to describe toys while speaking into a tape recorder with and without the metronome and pacing instructions. Tables show statistical comparisons for differential rates of speech. Boys identified as stutterers showed a significant decrease in rate of dysfluency when the metronome was used. The differences between the experimental subjects instructed to pace their speech and those given no instructions was not significant. Possibilities for speech therapy are discussed. It is suggested that a metronome could be effectively used without telling the child why, and thus without calling the child's attention to his impediment. (GD)

ABSTRACT 23442

EC 02 3442 ED 041 412
Publ. Date Jan 70 88p.
Girardeau, Frederic L., Ed.; Spradlin, Joseph E., Ed.

A Functional Analysis Approach to Speech and Language. ASHA Monographs, Number 14.

American Speech And Hearing Association, Washington, D. C.

EDRS mf, hc

ASHA Monographs, American Speech And Hearing Association, 9030 Old Georgetown Road, Washington, D. C. 20014 (\$4.00).

Descriptors: exceptional child research; speech handicapped; speech therapy; operant conditioning; aurally handicapped; reinforcement; television; articulation (speech); minimally brain injured; behavior change; speech pathology

Theory and laboratory research in oper-

ant behavior are applied to clinical practice in speech pathology. Introductory material summarizes the principles of operant conditioning as related to speech therapy. Clinical application is presented in the following areas: reinforcing properties of a television presented listener; reduction of reading and speaking rates; stimulus control of phoneme articulation; increase of functional speech by a brain-injured child; establishing and maintaining echolic speech by a nonverbal child; and deceleration of inappropriate vocal behavior by a hard of hearing child. A concluding chapter deals with implications of a functional approach to speech pathology and audiology. (JB)

ABSTRACT 23493

EC 02 3493 ED N.A.
Publ. Date May 70 12p.
Daly, David A.; Frick, James V.

The Effects of Punishing Stuttering Expectations and Stuttering Utterances: A Comparative Study.

EDRS not available

Behavior Therapy; V1 N2 P228-39 May 1970

Descriptors: exceptional child research; speech handicapped; stuttering; negative reinforcement; speech therapy; adults

The effects of contingent shock on signaled stuttering expectancies and/or stuttering utterances were studied in 36 adult male stutterers. Each subject participated in only one of three different punishment conditions. Each condition consisted of three segments: Base Rate, Training, and Recovery. Punishment was administered only during the Training segments. Electroshock was delivered contingent upon signaled expectancies to stutter in one condition; in a second condition, shock was administered for emitted stuttering utterances; and in the third condition, the effect of punishment for both signaled expectancies and stuttered utterances was studied. The general findings were: punishment of signaled expectancies effected only a moderate reduction in stuttering expectancies; stuttering utterance contingent shock effected a significant decrease in stuttering; and the combined punishment procedure effected significant reductions in both signaled expectancies and stuttering utterances, though the combined punishment procedure did not effect a more immediate or a more significant reduction in stuttering than the stuttering utterance contingent punishment procedure. (Author)

ABSTRACT 23575

EC 02 3575 ED 042 308
Publ. Date May 70 97p.

Bell, Dorothy Mays; Sanders, Edwina
An Investigation of an Individualized Approach to Evaluating, Grouping, and Planning Therapy for Children with Functional Articulation Problems in the First and Second Grades in a Public School System. Final Report.

Texas Christian University, Fort Worth;

Fort Worth Independent School District, Texas
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-7-9-530035-0093(010)
BR-9-G-035

Descriptors: exceptional child research; speech handicapped; articulation (speech); speech therapy; grouping (instructional purposes); auditory perception; elementary school students

A study was conducted to investigate methods of grouping children in grades 1 and 2 in a speech and hearing therapy program, and to determine the prevalence of certain auditory skills and deviant swallowing behavior associated with articulation problems. A screening test of articulation identified 255 control and 255 experimental subjects. A test battery was administered, on the basis of which six therapy groups were formed. Statistical analysis of data collected from a later administration of tests showed the grouping of children with articulation problems, and the use of pre-professionals (graduate students in speech and hearing pathology) to be effective procedures. Five of the groups achieved mean gain of articulation scores greater than that of the control groups. Of the 12 variables studied, nine achieved significant gain by the experimental samples in any group. Association of auditory deviations with articulation problems was confirmed, but deviant swallowing behavior was not a factor. (KW)

ABSTRACT 23613

EC 02 3613 ED N.A.
Publ. Date Aug 70 Sp.
Marshall, Robert C.

The Effects of Response Contingent Punishment upon a Defective Articulation Response.

EDRS not available

Journal Of Speech And Hearing Disorders; V35 N3 P236-40 Aug 1970

Descriptors: exceptional child research; speech handicapped; articulation (speech); speech therapy; conditioned stimulus; negative reinforcement

The effective use of a response contingent punishing stimulus (electric shock) in the amelioration of an incorrect articulation response is described. The patient was a 20-year-old white male who complained that his /s/ and /z/ interdental lisp problem kept him from attending a special school. Following several ear training sessions, finger electrodes from a Grason-Stadler Psychogalvanometer were attached to the third and fourth fingers of the patient's left hand. The shock was introduced during the second period of each session. The first and third parts of the session the clinician merely counted the errors. After eight sessions the error rate was so low therapy was discontinued. Follow-up visits showed the patient maintained a low error rate. The clinician used shock because rapid correction of the lisp was important to the patient for vocational

advancement, the speech disturbance was simple, and the patient understood the reasons for the shock. For certain clients, with certain conditions, response contingent punishment can be useful. (GD)

ABSTRACT 30104

EC 03 0104 ED 043 178
Publ. Date Sep 69 132p.

Gregory, Hugo H.

An Assessment of the Results of Stuttering Therapy.

Northwestern University, Evanston, Illinois

Social And Rehabilitation Service (DHEW), Washington, D. C., Research And Demonstration Grants
EDRS mf,hc

Descriptors: exceptional child research; stuttering; speech therapy; speech handicapped; adults; speech evaluation; anxiety; progressive relaxation; psychological patterns

To investigate the effects of stuttering therapy involving the avoidance reduction-anxiety reduction approach, a study was conducted with 16 adult stutterers who received group and individual therapy for two evenings a week for nine months. Evaluations were made nine months prior to therapy, at the beginning and end of therapy, and nine months after the close of the treatment. Results indicated that the more severe stutterers showed improvement during therapy but regressed slightly during the followup period, while those subjects with a less severe handicap maintained their improvement during the followup period. Since the progress of the subjects was not statistically significant, it was concluded that modifications of the therapy program were necessary for more effective and lasting results. The various testing devices revealed certain changes in areas of personality and attitudes, but showed no change in speech associated anxiety. (RD)

ABSTRACT 30300

EC 03 0300 ED N.A.
Publ. Date Oct 70 4p.

Nolan, J. Dennis; Pence, Connie

Operant Conditioning Principles in the Treatment of a Selectively Mute Child.

EDRS not available

Journal Of Consulting And Clinical Psychology; V35 N2 P265-8 Oct 1970

Descriptors: exceptional child research; speech handicapped; speech therapy; speech improvement; case studies

The treatment of a 10-year-old selectively mute girl is reported. Over the course of eight months of almost continuous contact, relatively normal speaking patterns were generated. At a one-year follow-up, her speech was indistinguishable from that of her classmates. She had improved even further in the natural environment and no new problems had developed. (Author)

ABSTRACT 30404

EC 03 0404 ED N.A.
Publ. Date Sep 70 17p.

Williams, Frederick

Psychological Correlates of Speech Characteristics: On Sounding Disadvantaged.

EDRS not available

Journal Of Speech And Hearing Research; V13 N3 P472-88 Sep 1970

Descriptors: exceptional child research; speech handicapped; teacher attitudes; disadvantaged youth; Negro dialects; racial discrimination; language patterns; evaluation criteria; social status

Grade school teachers tended to differentiate the speech samples of children along two gross and relatively independent dimensions tentatively labeled confidence-eagerness and ethnicity-nonstandardness. Specific ratings of a child's social status could be interpreted relative to this two-dimensional judgmental model. Moreover, based on measured characteristics of the speech samples, it was possible to develop interpretable prediction equations for variations in the social status ratings. Judgments of social status coincided with an earlier assigned socioeconomic index far more so for Negro than for white children. This prevailed generally with white and Negro teachers, sex of child, and the child's speech topic. Although judgmental dimensions and prediction equations were roughly similar for Negro and white teachers, differences pointed to more dependence between ratings of race and status on the part of white teachers. When rating a child as high status, the white teachers had a greater tendency to identify him as being white, even if the child himself were Negro. (Author)

ABSTRACT 30414

EC 03 0414 ED N.A.
Publ. Date Sep 70 17p.

Sarno, Martha Taylor And Others

Speech Therapy and Language Recovery in Severe Aphasia.

EDRS not available

Journal Of Speech And Hearing Research; V13 N3 P607-23 Sep 1970

Descriptors: exceptional child research; speech handicapped; aphasia; speech therapy; adults; programed instruction; language tests; language skills; audiovisual materials

This study was designed to investigate whether speech therapy enhances language recovery in severe aphasia and whether or not the method of speech therapy used affects recovery if it occurs. Thirty-one post CVA, severe expressive-receptive aphasics were assigned to one of three groups: programed instruction, nonprogramed instruction, and no treatment. All groups were comparable with respect to age, duration of symptoms, sex distribution, and education. Patients were initially tested to establish their level of functional language skills and ability to perform the terminal behaviors to be taught. Patients in the treatment groups re-

ceived up to 40 hours of therapy. Post-tests were administered individually after each terminal behavior was taught. All posttests were readministered at the termination of treatment and again one month after termination to determine the degree to which a behavior had been retained. There were no significant differences in outcome under the three treatment conditions. Results strongly suggest that current speech therapy does not modify verbal behavior in this population. A more realistic approach to the overall rehabilitation management of the severe aphasic, and more careful selection of patients who will receive speech therapy is suggested. (Author)

ABSTRACT 30585

EC 03 0585 ED 042 366
Publ. Date Jun 70 95p.

Boone, Daniel R.; Stech, Ernest L.
The Development of Clinical Skills in Speech Pathology by Audiocassette and Videotape Self-Confrontation. Final Report.

Denver University, Colorado, Speech And Hearing Center

Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped

EDRS mf, hc
OEG-9-071318-2814
BR-1381

Descriptors: exceptional child research; speech handicapped; aurally handicapped; speech therapists; professional education, audiovisual instruction; videotape recordings; phonotape recordings; speech therapy

Twenty student speech and hearing clinicians were studied on the relative effectiveness of using audiotape and videotape confrontation group, and ten to the videotape group. Each listened to segments of their taped therapy sessions, scoring them as they listened. Changes were found among all subjects in their knowledge of and attitude toward behavioral concepts which were tested before and after the experiment. No significant changes in amount of positive reinforcement given over the 8 weeks were noticed, but more negative reinforcers (punishment) were used. Results showed both modes of self-confrontation were effective in changing the verbal behaviors of student clinicians, and both lent themselves well to training clinicians. (Author/KW)

ABSTRACT 30656

EC 03 0656 ED N.A.
Publ. Date 67 152p.

Ewing, Alex W. G.
Aphasia in Children.
EDRS not available

Hafner Publishing Company, 31 East 10th Street, New York, New York 10003 (\$7.00).

Descriptors: exceptional child research; aphasia; audiometric tests; language development; speech handicaps; aurally handicapped; deaf; language handi-

capped; evaluation methods; literature reviews

Research on aphasia is reported. Methodology of testing the hearing of children who do not speak and who do not understand speech is described. Evaluation of hearing tests with 100 persons is provided, including reference to physical analysis of speech sounds and the effect of high frequency deafness on speech and language development. Groups of subjects discussed include six apparently aphasic children who were found to be deaf to high frequency sounds and four who were found to be not deaf, nor aphasic, but linguistically retarded. Literature on adult aphasia (from cortical lesions) and aphasia in children is reviewed. Analysis is made of speech and language behavior of high-frequency deaf children, aphasic children, and aphasic adults. Several conclusions are set forth. (MS)

ABSTRACT 30857

EC 03 0857 ED N.A.
Publ. Date Dec 70 2p.

Martin, Richard; Berndt, Lois A.
The Effects of Time-Out on Stuttering in a 12 Year Old Boy.

EDRS not available
Exceptional Children; V37 N4 P303-4
Dec 1970

Descriptors: exceptional child research; speech handicapped; behavior change; stuttering; negative reinforcement; reinforcement

After a baserate session during which an experimenter tallied stuttering frequencies, a chime and red light were used each time the subject stuttered. He was instructed to stop reading until the light went off. The introduction of the time-out reduced stuttering frequency from around 28 per 2 minutes to virtually zero. A slight increase was noted after cessation of the time-out. Additional research in this area is recommended. (RJ)

ABSTRACT 31190

EC 03 1190 ED N.A.
Publ. Date Dec 70 13p.

Wingate, M. E.
Effect on Stuttering of Changes in Audition.

EDRS not available
Journal Of Speech And Hearing Research; V13 N4 P861-73 Dec 1970

Descriptors: exceptional child research; speech handicapped; stuttering; auditory perception; audition (physiology)

The article presents an analysis of the ameliorative effect on stuttering known to be associated with different conditions affecting auditory reception. An integral explanation for the salutary effect of all of these conditions is derived, focusing on the indirect modification of vocal function. Conclusions are consistent with the analysis presented in a previous paper which dealt with the fluency-enhancing effects of a number of other conditions. (Author)

ABSTRACT 31191

EC 03 1191 ED N.A.
Publ. Date Dec 70 9p.

Silverman, Franklin H.
Distribution of Instances of Disfluency in Consecutive Readings of Different Passages by Nonstutterers.

EDRS not available
Journal Of Speech And Hearing Research; V13 N4 P874-82 Dec 1970

Descriptors: exceptional child research; speech handicapped; stuttering; oral reading; behavior theories

Fourteen adult male nonstutterers read five passages. The order in which the passages were read was randomly determined for each subject. The mean number of instances of disfluency during each of the five readings was computed. As a group, the subjects did not exhibit the adaptation effect. Their mean frequency of disfluency increased from the first to the third reading, after which it decreased. This suggests that the nature of the material read exerts a similar influence upon the course of nonstutterers' adaptation as it has been shown to exert upon the course of stutterers' adaptation. Several implications are discussed. (Author)

ABSTRACT 31198

EC 03 1198 ED N.A.
Publ. Date Nov 70 25p.

Compton, Arthur J.
Generative Studies of Children's Phonological Disorders.

EDRS not available
Journal Of Speech And Hearing Disorders; V35 N4 P315-39 Nov 1970

Presented In Part At The National Convention Of The American Speech And Hearing Association (44th, Denver, November, 1968).

Descriptors: exceptional child research; speech handicapped; articulation (speech); phonemes; speech therapy; phonology; phonetics; speech evaluation; speech habits

The purpose of the study was to illustrate that the defective sounds of speech characterizing an articulatory disorder are part of a coherent and productive system organized by means of phonological principles, and failure to recognize these organizing principles leads to hit and miss therapy which may be ineffectual and may even cause new misarticulations. Phonological analyses of two children, ages 6 and 4 1/2 years, with 70-80% unintelligible speech are presented, which demonstrate their errors to be systematic against their own grammars, and which show that their misarticulations stem from a relatively small number of underlying phonological principles producing a larger number of actual deviant phonetic forms. These principles, defined in the study, are hypothesized to make up most of children's articulatory disorders. Therapy methods are discussed, and an experimental test confirming the validity and applicability of such grammatical formulations is reported. (Author/GD)

ABSTRACT 31202EC 03 1202 ED N.A.
Publ. Date Nov 70 3p.

Silverman, Franklin H.

Concern of Elementary-School Stutterers about Their Stuttering.EDRS not available
Journal Of Speech And Hearing Disorders; V35 N4 P361-3 Nov 1970

Descriptors: exceptional child research; speech handicapped; stuttering; speech skills; self evaluation; self concept

The purpose of the study was to provide some data on the level of concern of elementary school stutterers about their stuttering. Participants were 62 second through fifth-grade children who were being seen by speech clinicians for stuttering therapy. Stuttering severity ranged from mild to severe. A speech sample was recorded from each child consisting of oral reading and spontaneous speech. The experimenter then asked each child to tell him three wishes. Of the 62 children, only four (all males) made wishes mentioning stuttering. The data suggests that elementary school stutterers as a group, especially those below the fourth grade level, are not highly concerned about their stuttering. The approach used in this study may be useful clinically for establishing a child's level of concern about his stuttering. (GD)

ABSTRACT 31204EC 03 1204 ED N.A.
Publ. Date Nov 70 8p.
Webster, L. Michael**A Clinical Report on the Measured Effectiveness of Certain Desensitization Techniques with Stutterers.**EDRS not available
Journal Of Speech And Hearing Disorders; V35 N4 P369-76 Nov 1970

Descriptors: exceptional child research; speech handicapped; stuttering; speech therapy; stimulus behavior; case studies; desensitization

Four case histories are presented to illustrate the use of desensitization procedures and the measurement of their effectiveness by means of the adaptation and spontaneous recovery phenomenon. These reports represent the therapy procedures and results with patients seen consecutively. With the first two cases, both males, ages 18 and 27 years, the clinician used the patient's written narrative as a guide for constructing realistic scenes, and the desensitization procedures described by Brutton and Shoemaker were employed. With both cases the desensitization technique was effective. With Case 3, a 31-year-old male, a new desensitization technique was introduced. He was trained to present the stimulus scenes to himself while repeatedly reading his written narrative of the emotion-evoking situation. Advantages of this technique are discussed. Case 4, a 25-year-old male, indicated that there is a correlation between spontaneous recovery and actual improvement. Both the Brutton and Shoemaker and new

techniques described appear to be clinically significant procedures. Further research is suggested. (GD)

ABSTRACT 31205EC 03 1205 ED N.A.
Publ. Date Nov 70 14p.
Holland, Audrey L.**Case Studies in Aphasia Rehabilitation Using Programed Instruction.**EDRS not available
Journal Of Speech And Hearing Disorders; V35 N4 P377-90 Nov 1970

Descriptors: exceptional child research; speech handicapped; aphasia; programed instruction; case studies; speech therapy; group therapy; programed materials

The advantages and limitations of applying programed procedures in a clinic to help aphasic clients are discussed. The background for this work is summarized, a series of seven selected case records and one semiprogramed group experience are reviewed, and some general considerations regarding programed instruction for aphasics are discussed. The cause of the aphasia and the program used for each case is described. The summary of programed approaches for individual patients is presented in table form including the activity, stimulus mode, and response form. Problems associated with programed instruction are discussed including the nature of the teaching material and how to use the materials for aphasics. It is emphasized that it is probably more practical for the clinician to devote his time to experimental development of his own programed materials, than to use materials developed by another clinician. (GD)

ABSTRACT 31967EC 03 1967 ED N.A.
Publ. Date Apr 71 5p.

Holloway, Gordon F.

Auditory-Visual Integration in Language-Delayed Children.EDRS not available
Journal Of Learning Disabilities; V4 N4 P204-8 Apr 1971

Descriptors: exceptional child research; learning disabilities; retarded speech development; visual perception; auditory perception; perceptual motor coordination; perception; psycholinguistics

Twelve language-delayed children with non-specific etiologies were matched with children having normal language development for age, sex, and IQ. Measurement of auditory-visual integrative ability, visual-motor integrative ability, and perception of distorted speech revealed the two groups to be significantly different in the auditory-visual component and perception of distorted speech, but not in visual-motor integrative ability. (Author)

ABSTRACT 32169EC 03 2169 ED 049 588
Publ. Date Oct 70 60p.

Mann, James W.; May, Jane

The Status of Speech Pathology and**Audiology Programs In Elementary and Secondary Schools.**Mississippi University, University, School of Education
EDRS mf.hc

Descriptors: aurally handicapped; speech handicapped; professional personnel; questionnaires; exceptional child research; speech therapists; public schools; audiolingual methods; speech therapy; hearing therapy; elementary education; secondary education; Mississippi

Addressed primarily to the prospective as well as the working, speech and hearing clinician, the study investigated the current practices and status of public school speech and hearing programs in Mississippi. A questionnaire was forwarded to 49 speech and hearing clinicians to determine professional title and relationships, screening and diagnosis, classification and distribution of disorders, remedial procedures, supervision and speech improvement. The results were felt to point up such needs as standardization of professional titles at the state level, more consistent and precise methods of examination of speech disorders; some standard program management practices; more joint responsibility shared with the superintendents, parents, principals, teachers, and therapist; more teacher guidance from the speech clinician. A copy of the questionnaire completed by the speech and hearing personnel is included in the appendix. (CD)

ABSTRACT 32281EC 03 2281 ED N.A.
Publ. Date May 71 11p.

McReynolds, Leija V.; Huston, Kay

A Distinctive Feature Analysis of Children's Misarticulations.EDRS not available
Journal Of Speech And Hearing Disorders; V36 N2 P155-66 May 1971

Descriptors: exceptional child research; speech handicapped; articulation (speech); speech evaluation; linguistics; phonetics

The articulation of 10 children with severe misarticulations was subjected to a feature analysis. The 13 distinctive features of English phonology as proposed by Jakobson, Fant, and Halle (1952) and Chomsky and Halle (1968) were used for the study. Phonetic transcriptions of responses on the McDonald Deep Test of Articulation formed the basis for the analysis. Two sets of data were compiled: the children's feature systems in comparison to the English system and a traditional articulation evaluation of phoneme articulation. Results indicated that children's feature errors were consistent across phonemes which contained the feature. It was further determined that misarticulations can be only partially described as a function of absence of features. Many of the errors occurred in the way features were used in particular combinations or contexts by the children. Errors resulted when children applied rules for feature usage which were different from the phonological rules in

English. It is suggested that a distinctive feature analysis may offer a more efficient approach to articulation training. (Author)

ABSTRACT 32291

EC 03 2291 ED N.A.
Publ. Date May 71 17p.
Ryan, Bruce P.
Operant Procedures Applied to Stuttering Therapy for Children.
EDRS not available
Journal of Speech and Hearing Disorders; V36 N2 P264-80 May 1971

Descriptors: exceptional child research; speech handicapped; stuttering; speech therapy; operant conditioning; behavior change

Described are operant stuttering therapy programs for five children ranging in age from 6 to 9 years. The programs included programed desensitization, delayed auditory feedback, and gradual increase in the length and complexity of the speech utterance. Reinforcing events ranged from social reward to points which could be exchanged for toys. The programs varied in length from 15 to 73.3 hours. They were all successful in helping the children to establish fluent speech. Special transfer and maintenance programs were necessary for some of the children. Followup measures indicated that the children had maintained their fluency. The value of viewing stuttering as operant behavior was demonstrated. (Author)

ABSTRACT 32345

EC 03 2345 ED N.A.
Publ. Date Apr 71 9p.
Lewis, Ruth
Survey of the Intelligence of Cleft-Lip and Cleft-Palate Children in Ontario.
EDRS not available
British Journal of Disorders of Communication; V6 N1 P17-25 Apr 1971

Descriptors: exceptional child research; physically handicapped; cleft lip; cleft palate; anomalies; intelligence tests; environmental influences; followup studies; surveys; Canada

To assess the IQ's of children with cleft lip and cleft palate and determine the relationship of these IQ's with other variables such as associated congenital anomalies and hearing loss, 548 cleft lip and cleft palate children (4 to 16 years) from Ontario, Canada were examined. It was noted that the mean IQ for the children was six points lower than the theoretical mean of 100. The difference in the mean IQ for cases with associated congenital anomalies as compared to cases without anomalies was considered statistically significant (at the one percent level). A control study was felt to show that the anomaly itself had a more significant bearing on the difference in the mean IQ's than did the type of family. A followup study of 50 cases selected on the basis of successful therapy was felt to show an upgrading in IQ (significant at the one percent level). It was concluded that multiple causes may account for the difference in intelligence of the cleft pal-

ate population and the general population; and that environmental factors may change IQ ratings. (CD)

ABSTRACT 32492

EC 03 2492 ED N.A.
Publ. Date Jun 71 8p.
Weiner, Paul S.
Stability and Validity of Two Measures of Intelligence Used with Children Whose Language Development Is Delayed.
EDRS not available
Journal of Speech and Hearing Research; V14 N2 P254-61 Jun 1971

Descriptors: exceptional child research; retarded speech development; intelligence tests; test evaluation; preschool evaluation; test validity; test reliability; Arthur Adaptation of the Leiter International Performance Scale; Peabody Picture Vocabulary Test

An assessment was made of reliability and validity of the Arthur Adaptation of the Leiter International Performance Scale (AALIPS) and the Peabody Picture Vocabulary Test (PPVT) when used with preschool, language delayed children. The tests were used to examine a group of such children on three occasions. Six months elapsed between the first two administrations and approximately 2 years, on the average, between the first and third. On the last occasion, the Wechsler Intelligence Scale for Children (WISC) was also administered. The AALIPS proved to be quite useful as a gauge of intelligence level for this population. Measurements on it were stable through time and also predictive of later functioning on the WISC, particularly on the nonverbal section of that test. Useful in the group study, the AALIPS was also helpful in individual cases if interpretations were limited to judgments of normal and subnormal functioning. The PPVT was equally stable as a measure of group functioning. However, it was much less successful in predicting later functioning on the verbal section of the WISC. It seems to be much more limited than the AALIPS as a measure of intellectual functioning of preschool, language delayed children. Its scope is seen as a restricted though possibly helpful one. (Author)

ABSTRACT 32495

EC 03 2495 ED N.A.
Publ. Date Jun 71 7p.
Leonard, Laurence B.; Webb, Clarence E.
An Automated Therapy Program for Articulatory Correction.
EDRS not available
Journal of Speech and Hearing Research; V14 N2 P338-44 Jun 1971

Descriptors: exceptional child research; speech handicapped; articulation (speech); speech therapy; teaching machines; positive reinforcement; feedback

An automated therapy program, which consisted of 10 half-hour sessions, was designed to establish appropriate production of seven speech sounds in isolation and in words. The apparatus employed

utilized tape-recorded material for stimuli and immediate playback to the child of his own correct response, made possible by integrating a delayed feedback (4 sec) device into the system, for reinforcement. A highly significant improvement occurred between the initial and final testing of the eight children who participated in the study. It was also found that there was significant carry-over of correct productions of the sounds taught into words not practiced, although performance on the actual practice words was significantly higher still. (Author)

ABSTRACT 32660

EC 03 2660 ED N.A.
Publ. Date Jul 71 7p.
Sibinga, Maarten S.; Friedman, C. Jack
Restraint and Speech.
EDRS not available
Pediatrics; V48 N1 P116-22 Jul 1971

Descriptors: exceptional child research; retarded speech development; speech handicapped; language development; sensory deprivation; hospitalized children; infancy; articulation (speech); etiology

The incidence of delay in language development and difficulties in speech articulation was determined in 71 children selected because of a history of prior physical immobilization. Ten children were referred for psychological evaluation after contact with a speech department, 44 presented with a variety of learning and behavioral difficulties, and 17 children were known through social contacts. Nine children were clearly brain damaged while 13 showed questionable evidence of brain damage. Language delay and speech articulation problems occurred in at least 55% of the children in the various groups. Young age (4.7 months) at the time of the initial restraint experience, but not the duration of the initial restraint experience, was positively related to the presence of language delay and articulation problems. It was concluded that interference with sensorimotor function not directly involved in receptive or expressive speech functions might well be implicated in language and speech disturbances. (Author)

ABSTRACT 32709

EC 03 2709 ED N.A.
Publ. Date Sum 71 3p.
Burr, Helen G.; Ervin, Jean C.
Clearinghouse: Programed and Traditional Procedures in the Auditory Discrimination Phase of Articulatory Rehabilitation.
EDRS not available
Exceptional Children; V37 N10 P752-4 Sum 1971

Descriptors: exceptional child research; speech handicapped; articulation (speech); auditory perception; programed instruction; speech therapy

Automated programing and traditional speech therapy procedures for teaching auditory discrimination of the /s/ phoneme were compared. The EFI Audio Notebook was used, with a 20-lesson program recorded on EFI multichannel

magnetic tapes. Each lesson provided 156 half-minute randomized items, of which 78 were stimulus and 78 were repeat items, and lessons provided ascending levels of speech sound discrimination difficulty. Matched control and experimental groups, selected from 40 second through fourth grade students were administered three articulation and auditory discrimination tests before, after, and 1 month after training. The groups were evaluated on achievement in auditory discrimination of the /s/ phoneme, general auditory discrimination, articulation of the /s/ phoneme, and articulation of other phonemes. Findings showed both groups progressed in similar manner and made similar gains, improving not just in discrimination of the /s/ phoneme but in all four behaviors tested. Retention of achievement was also similar for both groups, indicating that automated and traditional procedures are equally effective in teaching discrimination of the /s/ phoneme. (KW)

ABSTRACT 32767

EC 03 2767 ED N.A.
 Publ. Date Jun 71 3p.
 Carr, Velma; Stover, Joan
Can the Child Who Will Need Speech Therapy at Age Nine Be Identified at Age Six?
 EDRS not available
 Research Notes; P2-4 Jun 1971

Descriptors: exceptional child research; speech handicapped; screening tests; primary grades; articulation (speech); predictive measurement; identification

A study was conducted using the Predictive Screening Test of Articulation (PSTA) to identify at first grade level children who will still need speech therapy at third grade level if none is provided earlier. For each of the 47 test items, correct responses receive a score of one and incorrect responses receive zero. Purpose of the study was to replicate the work of VanRiper and Erickson which established a score of 34 as optimal for determining which children should receive therapy at grade 1. In the fall of 1968, three teams of two speech therapists each screened 1,267 first graders. Children exhibiting speech errors (N equals 550) were given the PSTA. In September, 1970, 376 of these 550 were retested by the two therapist team, one using the PSTA and one using the interview technique. Results showed that 61.5% of the boys and 72.5% of the girls had developed error-free speech by grade 3. PSTA cut-off scores closely paralleled those of the VanRiper-Erickson study. Eighty-six percent who scored 34 or above in grade 1 no longer needed therapy. However, a cut-off score of 32 was recommended as more efficient. The PSTA was approximately 50% more efficient than the therapist alone in identifying first grade children for therapy. (KW)

ABSTRACT 32894

EC 03 2894 ED N.A.
 Publ. Date Aug 71 9p.
 Fiedler, Miriam F. and Others

A Speech Screening Procedure with Three-Year-Old Children.

EDRS not available
 Pediatrics; V48 N2 P268-76 Aug 1971

Descriptors: exceptional child research; retarded speech development; screening tests; language tests; language handicapped; early childhood; infancy; language development; learning disabilities; perinatal influences

A screening examination for use by non-professional interviewers in the home situation for evaluation of speech and language development of 3-year-old children was developed. The perinatal histories and developmental data for the first year of life were examined for 46 children who failed this screening examination and for 92 control subjects, matched for age, sex, and time of examination, who passed the screening examinations. Significant differences were found between the groups in incidence of complications of pregnancy and labor, prematurity and in various aspects of development during the first year of life. Follow-up psychological examinations at 4 years of age and psychological and neurological examinations at 7 years of age found marked differences between the groups still present, with the speech failure group presenting a significantly higher incidence of a variety of psychological and neurological deviations from the normal. (Author)

ABSTRACT 32895

EC 03 2895 ED N.A.
 Publ. Date Aug 71 20p.
 Bloch, Ellin L.; Goodstein, Leonard D.
Functional Speech Disorders and Personality: A Decade of Research.
 EDRS not available
 Journal of Speech and Hearing Disorders; V36 N3 P295-314 Aug 1971

Descriptors: exceptional child research; speech handicapped; personality; research reviews (publications); personal adjustment; parent influence; research methodology

The paper summarizes and evaluates the research literature published between 1958 and 1968, relating measured personality and adjustment to the functional (nonorganic) speech problems of articulation, delayed speech, voice, and stuttering. For each of these disorders, a review and evaluation of the research is presented on the personality and adjustment of children suffering from that disorder, their parents, and, where appropriate, adults with that disorder. Methodological and conceptual problems are discussed in the context of the studies. It is concluded that the literature reviewed has yielded few conclusive findings and few new perspectives regarding the role of personality variables in the major functional speech disorders. The methodological and conceptual inadequacies of most studies have been striking, and steady research efforts have yielded no firm evidence that differentiates speech-defective persons and their parents from normal speakers and their parents in terms of general adjust-

ment or broadly identifiable personality patterns. Recommended as profitable is concentration of future research on specific within-group variables, such as improvement in therapy, rather than to continue the present focus. (Author)

ABSTRACT 32903

EC 03 2903 ED N.A.
 Publ. Date Aug 71 7p.
 Ryan, Bruce P.

A Study of the Effectiveness of the S-Pack Program in the Elimination of Frontal Lipping Behavior in Third-Grade Children.

EDRS not available
 Journal of Speech and Hearing Disorders; V36 N3 P390-6 Aug 1971

Descriptors: exceptional child research; speech handicapped; speech therapy; programed instruction; articulation (speech); parent role; operant conditioning; S-Pack Program

The clinical study evaluated the effectiveness of the S-Pack Program in eliminating frontal lipping behavior. The subjects were 10 male and 8 female third-grade children with frontal lisps. Six clinicians put them through the three-part establishment program. This was followed by a 15-day transfer program carried out by their parents. An articulation screening test (UOST), the Predictive Screening Test of Articulation (PSTA), and the Arizona Articulation Proficiency Scale (AAPS) administered before and after the program indicated significant improvement in /s/ production. An analysis of a sample of conversational speech taken at the end of the program revealed that 50% of the children demonstrated 90% or better /s/ productions. It was concluded that the S-Pack is an effective, efficient procedure for correcting frontal lisps. (Author)

ABSTRACT 32936

EC 03 2936 ED N.A.
 Publ. Date 71 163p.
 Bleiberg, Aaron H.; Luebling, Harry E.
Parents Guide to Cleft Palate Habilitation: The Team Approach.
 EDRS not available
 Exposition Press, Inc., 50 Jericho Turnpike, Jericho, New York 11753 (\$7.50).

Descriptors: exceptional child research; speech handicapped; cleft palate; cleft lip; parent role; parent child relationship; interdisciplinary approach

Written primarily to help parents of children with clefts fulfill their important role in the habilitation process, the book integrates, in nontechnical language, the findings of a research study conducted by the authors concerning the role and responsibilities of parents in the team approach to cleft palate habilitation. Typical problems of the child with a cleft are first discussed. Then the modern-day team approach to cleft palate habilitation is discussed, with emphasis on the roles of numerous specialists. Procedures in cleft palate habilitation are explained, as well as the causes of cleft lip and cleft palate. The authors then relate the child's emotional and speech develop-

ment to one another. The parent's role and responsibilities in cleft palate habilitation are explained, followed by discussion of a nationwide survey of cleft palate centers and the problems most often encountered by parents. A short bibliography of recommended reading for parents is appended, in addition to an extensive glossary of terms commonly used in cleft palate habilitation, and a list of cleft palate terms accepted by the American Cleft Palate Association. (CB)

ABSTRACT 32992

EC 03 2992 ED N.A.
Publ. Date 71 9p.

Seybold, Charles D.

The Value and Use of Music Activities in the Treatment of Speech Delayed Children.

EDRS not available

Journal of Music Therapy; V8 N3 P102-110 Fall 1971

Descriptors: exceptional child research; retarded speech development; learning disabilities; preschool children; language handicapped; speech therapy; music; motivation techniques; expressive language

Designed to assess both value and use of musical activities in treatment of speech delayed children, a speech therapy program with musical activities was conducted with four speech delayed, preschool male children for two weekly, 50-minute sessions over 8 weeks. Four matched controls received a regular program of speech therapy for speech delayed children. Experimental activities were devised to motivate spontaneous speech response by starting each activity with music, usually singing, and by following musical responses with related nonmusical activity. Test results of experimental and control groups were compared, finding that the experimental group results were significant at the .10 level. (CB)

ABSTRACT 33108

EC 03 3108 ED N.A.
Publ. Date Sep 71 9p.

Hull, Forrest M. and Others

The National Speech and Hearing Survey: Preliminary Results.

EDRS not available

ASHA; V13 N9 P501-9 Sep 1971

Descriptors: exceptional child research; aurally handicapped; speech handicapped; national surveys; incidence; statistical data

The preliminary results of the National Speech and Hearing Survey are reported in an article which first describes the method used to collect data on a random sample of 38,884 public school subjects. Discussions concern the testing environment, equipment, personnel (team members, training, and evaluator reliability), data collection procedures, and speech and hearing measures. Results were as follow: articulation performance improved as a function of increasing grade level, while almost without exception females were rated higher than males in each of the 12 grades; 66.4% of 38,802 subjects were judged to have acceptable articulation while only 2.0% were found to deviate extremely; there was a trend toward better hearing with increasing grade level, particularly in the first four to six grades; and very little difference was noted between ears as a function of either grade or sex except for males at 3000 and 4000 Hz where left-ear abnormalities were predominant. (RJ)

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